STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF COASTAL RESOURCES BUREAU OF PLANNING AND PROJECT REVIEW

Summary Report

Camden County Resource Recovery Facility City of Camden, Camden County

Waterfront Development Permit 86-1055-1

Decision by the Director conditionally approving a Waterfront Development Permit.

I. INTRODUCTION

The Waterfront Development Act of 1914 (N.J.S.A. 12:5-1 et seq.) requires that a coastal permit be obtained for activities proposed on currently or formerly flowed tideland areas and for upland development proposed within 500 feet of an existing high water line of a tidal waterway.

II. SUMMARY

Based on the Analysis that follows, Director is able to make positive findings as required by the Act and the Rules on Coastal Resource and Development Policies (N.J.A.C. 7:7E-1.1) provided all permit conditions are met. A Waterfront Development permit containing permit conditions is expressly contingent upon compliance with those conditions, and failure to comply with any or all of the permit conditions may result in appropriate enforcement actions, or suspension or revocation of the permit.

This Waterfront Development permit includes conditions to ensure compliance with the following policies: Mitigation (7:7E-1.6), Stormwater Runoff (8.7), and Vegetation (8.9).

Administrative History

By letter dated March 3, 1987, the Division advised the applicant's consultant, Foster Wheeler USA Corporation, that a Waterfront Development Permit would be required for all construction on the upland waterfront area within 500 feet of Newton Creek in addition to all lands below the mean high water line of the tidal tributary. The Division also advised the applicant to contact the Bureau of Tidelands concerning the need for a Tidelands Grant, Lease, or License for the projects. Furthermore, the Division determined that a Wetlands Permit would not be required because the NJDEP wetland map which delineated wetlands along the tidal ditch

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was not promulgated. However, if the wetland map is promulgated before or during construction, the applicant, Camden County Resource Recovery Associates, will be required to obtain a "Type B" Wetland Permit from the Division.

The project location is covered by Tidelands Maps #385-1872 and #392-1872. Only #385-1872 has been adopted and filed with the County Recording Office as of the date of this report. The Division will not pursue a tidelands claim for the site at this writing because Tidelands map #392-1872 remains incomplete and has not been adopted. Considering this, any forthcoming Waterfront Development Permit is in no way construed as a relinquishment by the State of New Jersey of any tidelands right, title or interest in the subject property or in any land surrounding the same.

A pre-application conference was held on October 15, 1986 at which time the Division reserved judgement on the project until wetland and stormwater runoff issues were satisfactorily addressed and a full coastal permit application was submitted for the Division's review. this, Division staff conducted two wetland boundary delineation inspections at the project site on November 12, and November 24, 1986. During the November 12 inspection, Division staff walked the wetland delineation together the applicant's consultants and a representative from the U.S. Army Corps of Engineers. This inspection found that the applicant's wetland delineation generally illustrated the limits of the tidal wetlands of the unnamed tidal ditch and Newton Creek but did not include existing non-tidal freshwater wetlands on the site. On November 24, 1987 the Division met the applicant's consultants at the project location and confirmed their delineation of the non-tidal freshwater wetland area.

The applicant submitted a waterfront development permit applicant, an Environmental Impact Statement (EIS), and site plans prepared by Foster Wheeler on December 22, 1986. On January 6, 1987 the applicant submitted a conceptual wetland mitigation plan to the Division for review. On January 8, 1987 the Division issued a deficiency letter requesting the submission of the following items: (a) a copy of the Final Environmental and Health Impact Statement dated April, 1985, (b) a letter from the Camden County Park Commission regarding the proposed wetland mitigation area for the project, (c) revisions in the wetland mitigation plan to provide 2 to 1 (created vs destroyed) mitigation for all wetlands filled by the project, (d) a discussion of alternate sites for the proposed project, (e) a study prepared by a qualified

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botanist on the status of endangered and threatened vegetation in the project area, (f) revised delineation of the non-tidal freshwater wetlands based on natural contours, (g) soil boring data, and (h) a discussion of alternative locations for runoff retention basin locations.

By letter dated February 3, 1987, the applicant outlined the status of their response to the Division's deficiency letter and requested a meeting with the Division to resolve outstanding issues. Subsequently, a meeting was held in Trenton on February 9, 1986 at which time the applicant stated their commitment to finalize their response to the Division's letter. At the same time, the Division advised the applicant that wetland mitigation on a 1 to 1 ratio would be acceptable if a systematic habitat evaluation technique, such as the Federal Highway Administration's Wetland Functional Assessment Method, was used to estimate the values of the existing wetlands and the anticipated values of the replacement wetlands.

The applicant finalized their response to the January 8, 1987 deficiency letter at a May 22, 1987 meeting with Division staff at the Camden County Park Commission Headquarters in Cherry Hill, Camden County. A plenary Public Hearing with the Division of Solid Waste Management acting as the lead agency was held on May 28, 1987 in Milandra Hall Community Center, in the City of Camden, Camden County.

Mr. Eugene McColligan of the Bureau of Planning and Project Review attended the hearing as an observer for the Division of Coastal Resources. Mr. Albert Montague of the Division of Solid Waste opened the meeting by outlining the permits required for the facility and the procedures which would be followed in conducting the hearing. Following this, statements were heard from Public officals, the applicant's representatives, and members of the Public. Specific testimony appears on pages 32 through 287 in the transcript of the public hearing, which is on file at the Division of Coastal Resources and the Division of Solid Waste.

The applicant's letter dated September 4, 1987 and received by the Division on September 10, 1987 completed the applicant's response to additional information requested by the staff Preliminary Analysis. This submittal included a revised wetland mitigation plan, typewritten calculations for total preconstruction runoff volumes and total post construction runoff volumes for the project location, and a landscaping plan. The waterfront development permit application was declared "complete for review" effective September 14, 1987.

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Therefore, in accordance with the provisions of the Water-front Development Act, a decision must be rendered by the Department on this permit application within 90 days, or by December 13, 1987.

Project Description

The proposed Camden County Resource Recovery Facility will be located on Block 860, Lot 15 in the City of Camden, Camden County. The 17.9 acre project project site is presently owned by the City of Camden and the South Jersey Federal Credit Union. The City will acquire the Credit Union site as part of project implementation, and the Pollution Control Financial Authority of Camden County (Authority) will purchase the entire site from the City. The project site will then remain in the ownership of the Authority and be learned to the Project Owner/Operator. The site is immediately bounded by Newton Creek to the south, Interstate 676 to the east, Morgan Boulevard to the north, and the Conrail right-of-way (2-track) to the west.

The proposed site of the Resource Recovery Facility is highly disturbed. Upland area which dominates, supports disturbed forest and old field. Newton Creek abuts the site on the south while a much smaller tidal creek and associated wetlands extends along the western border of the site crossing to I-676 on the east, in the northern portion of the site. In the southwestern portion of the site are two small areas of non-tidal wetlands (See the Site Drawings).

The Camden County Resource Recovery Facility will process municipal solid wastes (MSW) generated in twenty-six Camden County municipalities.

These municipalities include: Audubon Park Borough, Barrington Borough, Bellmawr Borough, Berlin Borough, Berlin Township, Brooklawn Borough, Camden City, Chesilhurst Borough, Clemetion Borough, Gibbsboro Borough, Gloucester Township, Gloucester City, Haddon Heights Borough, Hi-Nella Borough, Laurel Springs Borough, Lawnside Borough, Magnolia Borough, Mt. Ephraim Borough, Pine Hill Borough, Pine Valley Borough, Runnemede Borough, Somerdale Borough, Stratford Borough, Waterford Township, Winslow Township and Woodlynne Borough.

The facility is designed to accept 1,400 tons per day of processible municipal waste as fuel for the steam generator system and, at a heating value of 5,300 Btu/lb., produce 421,600 lb/hr. of steam at 650 psig and 750°F. The steam is

utilized by turbine generators to produce 32.7 MW of electrical power of which 29 MW are available for export and sale to Jersey Central Power and Light Company "Wheeling" via the Public Service Electric and Gas Company.

The wastewater and unacceptable stormwater from the facilities will tentatively be sent to the Camden County Municipal Utility Authority (CCUMA) Wastewater Treatment works. Negotiations with CCMUA are underway to complete the Sewer Extension and Industrial Pretreatment Permitting Process.

Municipal Solid Waste (MSW) is delivered to the plant by local municipalities, their contractual agents and/or private collectors. The trucks are scale weighed into the plant. After leaving the scales, the trucks enter the tipping building and dump the refuse into the storage pit. Refuse is transferred from the pit to the charging hopper of one of four operating steam generators by a spared bridge crane. The refuse is burned as it travels down the inclined reciprocating grate stokers in each boiler. Bottom ash is collected in the ash quench tank as it leaves the stoker. Fly ash is collected from the electrostatic precipitator and dry scrubber hoppers, conditioned and mixed with bottom ash. The total ash flow is then trucked to a landfill. A future ferrous metal collector can be added for recovering metal wastes prior to routing the ash to a landfill.

V. Analysis

The State of New Jersey's Coastal Management Program defines substantive policies to guide public decisions concerning significant proposed development and management of resources in New Jersey's Coastal Zone. The analysis of this coastal permit was based upon the Rules on Coastal Resources and Development (N.J.A.C. 7:7E-1.1 et seq.), adopted effective September 28, 1978 as amended to February 3, 1986. This analysis will refer to applicable policies by administrative code section.

Location Policies (7:7E-2.0)

The Location Policies classify all land and water features of the coastal zone into at least one category (Special, General Water, or General Land Areas) and assign a policy based on the proposed use of each type of location in each category.

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7:7E-1.6 Mitigation

Policy

When a permit shall allow the disturbance or loss of wetlands (see N.J.S.A. 7:7E-3.25) by filling or other means, this disturbance or loss must be compensated for by the creation or restoration of an area of wetlands at least twice the size of the surface area disturbed, unless the applicant can prove through the use of productivity models or other similar studies, that by restoring or creating a lesser area, there will be no net loss in the environmental value of wetlands in the aquatic system. Mitigation must be performed prior to or concurrent with activities that will disturb wetlands and immediately after activities that will temporarily disturb these habitats. The intent of the policy is to assure no net loss of aquatic habitat productivity, including flora and fauna.

Where the Division permits mitigation surface area of less than 2:1, monitoring will be required by the permittee to validate the productivity model. In such cases, the Division will require additional mitigation if this indicates a net loss. Under no circumstances shall the mitigation area be smaller than the disturbed area. Creation of wetlands from existing intertidal and subtidal shallows is not an acceptable form of mitigation, nor is transfer of title of existing wetlands to a government agency or conservation organization. The filling or destruction of wetlands or other environmentally sensitive resource, even if compensated for by mitigation, shall not be permitted unless acceptable under the applicable special area policy (N.J.A.C. 7:7E-3).

Mitigation shall also be selectively considered on a case-by-case basis as compensation for other policies not able to be met by a particular project. In general, mitigation should be similar in type and location to the resource disturbed or destroyed, i.e., replacement in kind within the same watershed. The Division will, however, consider proposals for mitigation that differ in type and/or location from the disturbed or destroyed resource provided the mitigation would provide a major contribution to meeting one of the Basic Coastal Policies.

The applicant proposes to mitigate the 1.1 acres filled by the project on a one to one (created vs destroyed) ratio. A preliminary wetlands mitigation plan was submitted to the Division on December 31, 1986 and revised April 14, 1987. According to the applicant's April 14, 1987 wetland

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mitigation plan, the 1.1 acre replacement wetland would consist of 0.9 acres of emergent wetlands and 0.2 acres of forested wetlands located along Newton Creek directly across Route 676 from the Camden County Resource Recovery Site. This location is presently owned by the Camden County Park Commission. A 7.0 acre tidal wetland and shallows area was developed on this site by Holt Hauling and Warehousing Inc. for mitigation of wetland impacts associated with a fill project for a marine terminal expansion.

At the Division's direction, the applicant used the Federal Highway Administration's (FHWA) Wetland Functional Assessment Method to estimate the Functional Values of the existing tidal and non-tidal wetlands on the project site as well as the proposed mitigation wetlands on the county park property. The Wetland Functional Assessment provided by the applicant found that the proposed mitigation wetlands would be of equal value to the existing wetlands.

In response to the additional information requested by the Preliminary Analysis, the applicant submitted a wetland mitigation plan which included: (a) restoration of the 0.35 acres of the Holt mitigation wetland after construction; (b) information on where the material excavated for the replacement wetland will be stored; a schedule for wetalnd vegetation plantings and a schedule for monitoring the site for 2 years after completion of the replacement wetland; and (c) information on the existing vegetation at the proposed wetland mitigation and the existing vegetation at the storage area for excavated materials from the replacement wetland.

Prior to construction.

- 1. The permittee shall mitigate the 1.1 acres of wetlands filled by the project on a one to one (created vs. destroyed) ratio as on shown plans in 6 sheets (dated June 16, 1987) prepared by Environmental Concern, Inc. In addition, the permittee shall restore the 0.38 acre Holt Hauling mitigation wetland disturbed by the construction of the replacement wetland. All planting and seeding work shall be completed as specified on Sheet 5 of 6.
- 2. The Division shall be notified in writing 30 days prior to the excavation of the wetland mitigation site. Also, the applicant shall provide the Division with yearly reports describing the species condition, density, and percentage of coverage of plants vegetating the mitigation area. Success as well as failure should be documented in writing and with color photographs. Planting recommendations

for any areas which are unsuccessful shall be submitted to the Division for approval.

3. An 85 percent coverage of the site by planted vegetation shall be considered acceptable at the end of the second growing season following final grading. This shall be measured in August. If at the end of the second growing season, 85% coverage is not achieved, then the permittee will be required by the Division to correct the situation by replanting or regrading the site. Colonization by Common Reed (Phragmites australis) shall not be considered successful mitigation and will require future remedial efforts by the applicant, as determined by the Division.

Special Areas (7:7E-3.0)

Special Areas are coastal areas which merit focused attention and special management policies. Where applicable General and Special Area policies differ, the Special Area policies shall be applied. The project site falls under the following Special Area Policies:

Wetlands (7:7E-3.26)

Wetlands are areas where the substrate is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions which are subject to the Wetlands Act, or the Coastal Area Facility Review Act (CAFRA) or the Waterfront Development Law.

Completion of the Camden County Resource Recovery Facility will require the filling of approximately 1.1 total acres of freshwater wetlands. Out of these 1.1 acres approximately 0.5 acre is mapped tidal freshwater wetlands, and the remaining 0.6 acre is classified non-tidal freshwater wetlands.

The tidal freshwater wetlands are delineated on NJDEP Wetland Maps 392-1872 and 385-1872 as well as Drawing #3536-1-41-109 prepared by the applicant dated December 8, 1986. The non-tidal freshwater wetlands are delineated on the applicants drawing #3536-1-41-110 dated December 22, 1986.

Proposed development in the tidal wetlands will include one controlled stormwater outfall; an access road culvert across the unnamed tidal ditch which traverses the site, and; -9-

one treated wastewater outfall, if required. Proposed development in the non-tidal freshwater wetlands includes; a stormwater retention basin; a perimeter facility roadway; ash trailer parking; and portions of the tipping floor.

Development of all kinds is prohibited in Wetlands unless the Department can find that the proposed development meets the following standards:

a. Requires water access or is water oriented as a central purpose of the basic function of the activity.

The applicant states "The Camden County RRF although not water dependent, does however, meet the rationale for this condition, i.e. the facility will not pre-empt use of the waterfront property for water oriented development. As previously noted, water oriented development on the proposed Camden County RRF is not feasible due to the nature of industry in the immediate area, and the railroad bridge crossing of Newton Creek, immediately adjacent, to the site. This bridge, with an average height of five (5) feet above the water elevation, prevents any access to the Delaware River where additional water oriented development would be beneficial".

- b. Has no prudent or feasible alternative on a non-wetland site. A comprehensive study of twelve sites by Camden County Solid Waste Management was made to investigate the most feasible site for the RRF. The proposed site was jointly selected by the City and County of Camden. The site is strategically located adjacent to the proposed South Camden Industrial Park to which the RRF may supply steam in the future. According to the applicant, the Division of Solid Waste approved the site by accepting the Preliminary Environmental and Health Statement in 1986.
- c. Will result in minimum feasible alteration or impairment of natural tidal circulation (or natural circulation in the case of non-tidal wetlands).

The applicant states that: "The proposed access road culvert has been designed to allow the natural tidal circulation and onsite stormwater to continue to flow without obstruction. This design is presently under review by the Bureau of Floodplain Management through the procedures established for the Stream Encroachment Permit". Also, by

revising the proposed stormwater runoff management plan, the applicant significantly reduced the project impacts to natural circulation in the non-tidal freshwater wetlands.

d. Will result in minimum feasible alteration or impairment of natural contour or the natural vegetation of the wetlands.

The taking of 1.1 acres of wetlands (0.5 tidal and 0.6 non-tidal for portions of the Resource Recovery Facility was thoroughly evaluated and all alternatives exhausted. None were found to be practicable. Since, there are no practicable alternatives to avoid construction in wetlands the applicant has developed a Wetland Mitigation Plan to compensate for losses of wetlands due to the project. The applicant has made a commitment to mitigate the adverse impacts of filling wetlands by constructing a new replacement wetland at a one to one (created vs destroyed) ratio on Camden County Park property directly across Route 676 from the project location. Generally speaking, the wetland replacement will provide "in kind" mitigation for impacts to tidal wetlands and "out of kind" mitigation for impacts to non-tidal wetlands. The project complies with this policy.

During and After Construction

- 1. Solid wastes and other construction related refuse shall not be placed or stockpiled in the NJDEP mapped wetlands associated with Newton Creek and adjacent areas but shall be disposed of in an environmentally acceptable manner in an approved landfill.
- 2. The permittee shall stake end-to-end hay bales or commercial soil control fabric creating a barrier between the proposed construction site and the tidal and non-tidal wetlands to control soil erosion and sedimentation. All disturbed soils shall be temporarily seeded and/or mulched until proper weather conditions exist for the establishment of a permanent vegetative cover.

General Water Areas (7:7E-4.0)

General Water Areas are areas which lie below either the mean high water line or the normal water level of non-tidal waters. Except at time of drought or extreme low tide, these areas are permanently inundated. General Water Areas are divided by volume and flushing rate into; Oceans; Open Bays; Semi-Enclosed and Back Bays; Tidal Guts; Large Rivers; Medium Rivers, Creeks and Streams; and Lakes, Ponds and Reservoirs.

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Some of these types are further divided for policy purposes into different depths.

Medium Rivers, Streams and Creeks (7:7E-4.8)

This channel type includes rivers, streams and creeks with a watershed area of less than 1,000 square miles. This includes watercourses such as the Hackensack, Passaic, Oldmans, Big Timber, Pennsauken, Navesink, Manasquan, Toms, Wading, Mullica, Great Egg, Maurice, Cohansey, Salem and Rancocas and smaller streams.

The Resource Recovery Facility will encroach on Newton Creek and on unnamed tidal (ditch) tributary. Approximately two outfalls will be constructed at Newton Creek. A roadway will be constructed across the tidal ditch in order to provide access from Morgan Boulevard to the plant site. Hydraulic capacity will be provided to allow maximum flow of water based on the 100 year flood and natural tidal circulation.

Acceptability Conditions for Use (7:7E-4.11)

Numerous developments or activities seek locations in New Jersey's coastal waters. Some uses involve locations both above and below mean high water line, in both Water and Water's Edge areas. This section defines the important uses of water areas managed by the Coastal Management Program and the conditions under which those uses are acceptable. Some projects involve combinations of uses, such as retaining structures, dredging, and filling. Other uses, such as Shore Protection uses, are defined under the Use Policies.

Filling (7:7E-4.11(i))

Filling in most water areas is discouraged, but limited filling may be considered for acceptability provided that:
(a) the use that requires the fill is water dependent, (b) there is a demonstrated need that cannot be satisfied by existing facilities, (c) there is no feasible or practical alternative site on an existing Water's Edge, (d) the minimum practical area is filled, (e) the adverse environmental impacts are minimized, e.g. by compensating for the loss of aquatic habitat for creation of an area of equivalent or greater environmental value elsewhere in the same estuary, and (f) minimal feasible interference is caused to Special Areas.

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During the road construction 745 cubic yards of material would be dredged from the ditch bed to facilitate footings for the riprap and culvert structures. In addition, riprap material is proposed to be placed below the mean high water line of Newton Creek for outfall protection. Approximately 2500 cubic yards of fill would be discharged into the ditch, to the 100 year flood elevation 10 ft. for the culverted road crossing. Approximately 500 cubic yards of fill/riprap would be discharged into the ditch for road bed and bank stabilization.

Bridges (7:7E-4.11(1))

A tidal drainage ditch bisects the plant site. In order to have access to the site, a ditch crossing is required. An elliptical culvert will be built for unobstructed passage of stormwater and tidal flows. This culvert will be built in accordance with the requirements of the Bureau of Floodplain Management thus complying with this policy.

Overhead Transmission Lines (7:7E-4.11 (n))

The resource recovery facility will produce electric power by burning MSW. Most of the electric power produced will be for export. To transport this electric power to the users, overhead transmission lines will be used. These lines will have to cross the tidal ditch, because there is no feasible alternative route that avoids crossing a water body. Due to the nature of the adjacent industrial area, there will not be any adverse visual impacts.

Outfalls and Intakes (7:7E-4.11(p))

There will be two outfalls to the Newton Creek from the plant site - one for the clean stormwater and other for treated waste water if required. No intakes are proposed for the planned RRF project. Therefore this particular aspect of the policy is not applicable.

General Location Policies (7:7E-6.0)

Policy on Location of Linear Development (7:7E-6.1)

A linear development, such as but not limited to a road, sewer line, or offshore pipeline, that must connect two points to function shall comply with specific location policies to determine the most acceptable route, to the maximum extent practicable. If part of the proposed alignment of a linear development is found to be unacceptable

under the specific location policies, that alignment may nonetheless be acceptable, provided:

- (a) there is no prudent or feasible alternative alignment which would have less impact on sensitive areas.
- (b) there will be no permanent or long term loss of unique or irreplaceable areas.
- (c) appropriate measures will be used to mitigate adverse environmental impacts to the maximum extent feasible, such as restoration of disturbed vegetation, habitat, and land and water features.
- (d) the alignment is located on or in existing transportation corridors and alignments, to the maximum extent practicable.

Proposed linear development on the Resource Recovery Facility property will include: an access road from Morgan Boulevard extending across the unnamed tidal ditch to the incinerator building; a roadway culvert in the tidal ditch; and two outfall structures into Newton Creek. The proposed project appears to be acceptable under the Location Policies provided that the appropriate Use and Resource Policies can be met.

Public Facility Use Policy (7:7E-7.6)

Public facilities include a broad range of public works for production, transfer, transmission, and recovery of water, sewerage and other utilities. The presence of an adequate infrastructure makes possible future development and responds to the needs created by present development. Upgrading existing facilities to meet development and redevelopment needs in developed waterfront areas is encouraged. New or expanded development is conditionally acceptable provided that three conditions are met:

- i. The public facility would serve a demonstrated need that be met by an existing public facility at the site or region.
- ii. Alternate technologies, including conservation, are an impractical or infeasible approach to meeting all or part of the need for the public facility.

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iii. The public facility would not generate significant secondary impacts inconsistent with the Coastal Resource and Development Policies.

The proposed Camden County Resource Recovery Facility was included as part of the 1984 Camden County Solid Waste Management Plan approved by the Commissioner on May 31, 1985. The following two site evaluation and selection studies were performed by professional engineering consultants for facility siting of a different project that involved a proposed co-incineration and cogeneration resource recovery facility related to the Camden County Municipal Utilities Authority's (CCMUA) Regional Treatment Project.

- Resource Recovery Planning Study
 Camden II Facility Phase II
 by a Joint Venture of Sanders and Thomas, Inc.
 and Tarqurn
 Liszewski Plus, August 1981
- Coincineration Feasibility Study Alternative Siting Study by Greeley & Hansen & Safe International, Inc., October 1982

In study No. 1 twelve (12) sites throughout the City of Camden were evaluated for a co-incineration project.

Eighteen (18) sites including a reexamination of the above twelve sites were selected for evaluation in Study No. 2. All of these study sites were shelved when the CCMUA determined that the burning of solid waste and sludge was not the most feasible nor cost effective method for disposal of the sludge from the recently expanded regional sewage treatment facility in Camden City. Instead, The CCMUA is planning to build an in-vessel composting operation.

The project complies with this policy.

Resource Policies (7:7E-8.0)

The third step in the screening process of the Coastal Resource and Development Policies involves a review of a proposed development in terms of its effect on various resources of the built and natural environment of the coastal zone, both at the proposed site as well as in its surrounding region. These policies serve as standards to which proposed development must adhere.

Stormwater Runoff (7:7E-8.7)

Stormwater Runoff is flow on the surface of the ground resulting from precipitation.

Runoff policies call for the minimization off-site runoff, increased on-site infiltration, simulation of natural drainage systems, and minimization of the amount of pollutants in stormwater runoff discharge to ground or surface water, and encourage natural filtration functions.

In response to the additional information requested by the Preliminary Analysis, the applicant provided typewritten calculations for total preconstruction runoff volumes and total post construction runoff volumes for the project location. These calculations indicate that the proposed stormwater drainage system meets the requirements of this policy.

As a condition of this Waterfront Development permit, prior to construction, the applicant will be required to submit copies of an approved Stream Encroachment Permit and NJPDES permits issued by the NJDEP Division of Water Resources to the Division 30 days prior to construction.

Vegetation (7:7E-8.9)

Vegetation on the site basically consists of an old field community bordered by thickets, an non-tidal freshwater wetland dominated by Black willow, and a tidal wetland adjacent to the unnamed ditch dominated by yellow water lily and arrow arum with a woody fringe dominated by Black Willow, elderberry, mulberry and other species.

Coastal development shall preserve to the maximum extent practicable, existing vegetation within a development site. New vegetation, particularly approximately native coastal species, shall be planted to the maximum extent practicable on portions of the site cleared by construction activities.

In response to the additional information requested by the Preliminary Analysis, the applicant provided a revised site plan (# 3536-1-47-2A) dated August 4, 1987 which depict post construction vegetation preservation zones and landscaping details for the project location. These plans show that the project meets the requirements of this policy.

Prior to Construction:

1. Submit a deed restriction for the Divisions approval which would prohibit the destruction of the vegetation preservation zones depicted on plan sheet (dated August 4, 1987) by facility staff.

During and after Construction:

1. The permittee agrees to permanently preserve a vegetative buffer consisting of pre-construction plant species.

VI. CONCLUSION

Based on the above analysis, the Director hereby finds that the applicable findings as required by the Waterfront Development Act and the Rules on Coastal Resource and Development Policies, will be met by the applicant provided all permit conditions are satisfied. A waterfront development permit containing permit conditions is expressly contingent upon compliance with any or all of these conditions. Noncompliance may result in appropriate enforcement action, or suspension and revocation of the permit.

Environmental Conditions Prior to Construction.

- l. The permittee shall mitigate the 1.1 acres of wetlands filled by the project on a one to one (created vs. destroyed) ratio as shown on plans in 6 sheets (dated June 16, 1987) prepared by Environmental Concern, Inc. In addition, the permittee shall restore the 0.38 acre Holt Hauling mitigation wetland disturbed by the construction of the replacement wetlands. All planting and seeding work shall be completed as specified on Sheet 5 of 6.
- 2. The Division shall be notified in writing 30 days prior to the excavation of the wetland mitigation site. Also, the applicant shall provide the Division with yearly reports describing the species condition, density, and percentage of coverage of plants vegetating the mitigation area. Areas of success as well as failure should be documented in writing and with color photographs. Planting recommendations for any areas which are unsuccessful shall be submitted to the Division for approval.
- 3. An 85 percent coverage of the site by planted vegetation shall be considered acceptable at the end of the second growing season following final grading. This shall be

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measured in August. If at the end of the second growing season, 85% coverage is not achieved, then the permittee will be required by the Division to correct the situation by replanting or regrading the site. Colonization by Common Reed (Phragmites australis) shall not be considered successful mitigation and will require future remedial efforts by the applicant, as determined by the Division.

- 4. Submit a deed restriction for the Divisions approval which would prohibit the destruction of the vegetation preservation zones depicted on plan sheet (dated August 4, 1987) by facility staff.
- 5. The applicant is required to submit copies of an approved Stream Encroachment Permit and NJDEP permits issued by the NJDEP Division on Water Resources to the Division 30 days prior to construction.

During and After Construction

- 1. Solid wastes and other construction related refuse shall not be placed or stockpiled in the NJDEP Mapped wetlands associated with Newton Creek and adjacent areas but shall be disposed of in an environmentally acceptable manner in an approved landfill.
- 2. The permittee shall stake end-to-end hay bales or commercial soil control fabric creating a barrier between the proposed construction site and the tidal and non-tidal wetlands to control soil erosion and sedimentation. All disturbed soils shall be temporarily seeded and/or mulched until proper weather conditions exist for the establishment of a permanent vegetative cover.
- 3. The permittee agrees to permanently preserve a vegetative buffer consisting of pre-construction plant species.

Prepared by:

Eugene T. McColligan

Principal Environmental

Specialist

Bureau of Planning and Project Review

Camden County Resource Recovery Facility City of Camden, Camden County Waterfront Development Permit 86-1055-1

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Recommended for Approval by:

Stene Whiher

Steven C. Whitney, Chief Bureau of Planning and Project Review

Approved by:

Division of Coastal Resources

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